David H. Meyer
Acting Deputy Director
Office of Electricity Delivery and
Energy Reliability
U.S. Department of Energy

Via e-mail to Economic.Dispatch@hq.doe.gov

Dear Mr. Meyer:

In response to your letter of September 1, 2005 to David Owens, attached is the combined response of Con Edison Energy, Con Edison Solutions and Con Edison Development to the Department of Energy's questions on economic dispatch.

- Q1) What are the procedures now used in your region for economic dispatch? Who is performing the dispatch (a utility, an ISO or RTO, or other) and over how large an area (geographic scope, MW load, MW generation resources, number of retail customers within the dispatch area)?
- A1) All of the domestic electricity activities from Con Edison Energy and its retail and generating affiliates (Con Edison Solutions and Con Edison Development) occur within NEPOOL, the New York ISO and PJM. In total, we own approximately 1,700 MW of generation which are bid into and economically dispatched by the ISO/RTOs and serve approximately 200,000 retail customers with an aggregate load of approximately 2,700 MW.
- 2) Is the Act's definition of economic dispatch (see above) appropriate? Over what geographic scale or area should economic dispatch be practiced? Besides cost and reliability, are there any other factors or considerations that should be considered in economic dispatch, and why?
- A2) The Act's definition is appropriate. In order to maximize the benefits, the security constrained economic dispatch should be deployed over as large a geographic scale as practicable. In areas where there are existing ISO/RTOs performing separate dispatches, it may not be economical (or politically acceptable) to merge them into a single organization but the ISO/RTOs should work towards reducing seams so that they can achieve most of the potential savings via coordinated but separate dispatches that approach the efficiency of a single optimized dispatch. In addition to cost and reliability, the economic dispatch should also have the objective of minimizing out-of-merit dispatch by modeling all constraints that can be resolved through the redispatch of generation. Put another way, in-market solutions to the reliability constraints on the system are preferable because they avoid the inefficiencies and unhedgeable costs associated with out-of-merit dispatch solutions.
- 3) How do economic dispatch procedures differ for different classes of generation, including utility-owned versus non-utility generation? Do actual operational practices differ from the formal procedures required under tariff or federal or state rules, or from the economic dispatch definition above? If there is a difference, please indicate what the difference is, how often this occurs, and its impacts upon non-utility generation and upon retail electricity users. If you have specific analyses or studies that document your position, please provide them.

- A3) Our experience is that the economic dispatch procedures in the North-East ISO/RTOs do not differ for different classes of generation because the dispatch is based on the bid parameters submitted by the responsible parties and is independent of whether the resources are utility owned or not. However, suppliers under legacy Power Purchase Agreements and/or RMR contracts may distort the true economic dispatch if they adopt bidding behavior based on these out-of-market contacts instead of the true economics based on the performance of the generation asset and the corresponding cost of fuel.
- 4) What changes in economic dispatch procedures would lead to more non-utility generator dispatch? If you think that changes are needed to current economic dispatch procedures in your area to better enable economic dispatch participation by nonutility generators, please explain the changes you recommend.
- A4) N/A see response to 3.
- 5) If economic dispatch causes greater dispatch and use of non-utility generation, what effects might this have on the grid, on the mix of energy and capacity available to retail customers, to energy prices and costs, to environmental emissions, or other impacts? How would this affect retail customers in particular states or nationwide? If you have specific analyses to support your position, please provide them to us.
- A5) Provided that the economic dispatch is based on submitted bids from market participants (including remaining utility owned generation) and reflect the full cost of producing energy including the cost of environmental credits, then retail customers should see benefits regardless of who owns the generation that is dispatched.
- 6) Could there be any implications for grid reliability positive or negative from greater use of economic dispatch? If so, how should economic dispatch be modified or enhanced to protect reliability?
- A6) The economic dispatch should explicitly model constraints on the transmission and distribution systems that can be impacted and relieved by the generation being dispatched. This will ensure that the economic solution does not impose any reliability problems on the system and, conversely, that potential constraints are resolved in an economically efficient manner which minimizes the need for out-of-market actions. For example, the New York ISO has made great inroads in modeling the transmission constraints within New York City and other load pocket and, for the most part, is able to identify market solutions to efficiently meet the reliability needs of the system and thereby reduce the need for out-of-market actions.

Respectfully Submitted

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